

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Bulk Chemicals - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: POLREP #1
Emergency Assessment / Oversight of PRP Response
Bulk Chemicals
A39M
Shoemakersville, PA
Latitude: 40.4712472 Longitude: -75.9717015

To: R3 RRC Response Center, USEPA
Kevin Boyd, EPA
Walter Bair, PADEP Emergency Response

From: Kelley Chase, On-Scene Coordinator

Date: 6/16/2019

Reporting Period: June 10, 2019 through June 11, 2019

1. Introduction

1.1 Background

Site Number:	A39M	Contract Number:
D.O. Number:		Action Memo Date:
Response Authority:	CERCLA	Response Type:
Response Lead:	EPA	Incident Category:
NPL Status:	Non NPL	Operable Unit:
Mobilization Date:	6/10/2019	Start Date:
Demob Date:		Completion Date:
CERCLIS ID:		RCRIS ID:
ERNS No.:		State Notification:
FPN#:		Reimbursable Account #:

1.1.1 Incident Category

Emergency Removal Site Evaluation / Oversight of PRP Removal Action

1.1.2 Site Description

The Site is an operating chemical manufacturing facility located in a residential neighborhood in Perry Township. The company, Bulk Chemicals, Inc., (BCI) has been operating at this location for over 40 years. BCI stores a large quantity and variety of chemicals on-site which are used to produce a various industrial pretreatment chemicals and industrial metal cleaners. Many of the chemicals stored and used on-site are highly corrosive. Strong oxidizers and some flammable chemicals are also stored and used on-site.

The Site is approximately one acre in size consisting of two large warehouse buildings located in close proximity to one another. The Upper Warehouse is generally used to store finished product and contains various chemical products staged in large totes, drums and other containers. The Lower Warehouse is used for storage of raw materials and for the production of various industrial chemical products. The Lower Warehouse was recently impacted by a nitric acid release and the subsequent fire.

The Lower Warehouse contains, among other things, six or more large bulk storage tanks; six or more large process tanks; and three large waste water storage tanks. The nitric acid tank that spilled, possibly due to a failed gasket, has a capacity of 4500 gallons. The warehouse has two large shelving rack systems that include up to five levels each. The facility stores various raw chemicals on these racks and on the floor. The containers on the racks, include 55-gallon steel and poly drums as well as other containers and bags of various raw materials. In addition, the warehouse is used to temporarily stage large 275-gallon totes containing various raw materials, finished materials as well as collected process waste water. Currently, approximately 33 totes are estimated to be staged inside the warehouse; many are stacked at least two high; at least three of the totes are stacked three high. Many of the totes and at least one of the tanks located in the Lower Warehouse are badly damaged as a result of the nitric acid release. Several containers have leaked or are leaking which has created a highly corrosive atmosphere inside the building. The subsequent fire further damaged certain containers and portions of the building. The electric service to the facility has been shut off.

1.1.2.1 Location

809 Mohrsville Road
Shoemakersville, Perry Township, Pennsylvania 19555

1.1.2.2 Description of Threat

On Sunday, June 9, 2019 the Berks County Emergency Management Agency (Berks County EMA) and the

Pennsylvania Department of Environmental Protection (PADEP) responded to a release of nitric acid at the BCI facility located on Mohrsville Road in Shoemakersville, Perry Township. Nitric acid is highly corrosive and is a listed hazardous substance under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

The facility reported that an estimated 2200 gallons of 62% nitric acid was released from a storage tank due to equipment failure. The tank is located inside one of two large facility buildings (Lower Warehouse). However the spill was not fully contained within the building and an unknown quantity of nitric acid was released to the ground at the facility. Berks County EMA responded and transferred the remaining nitric acid, approximately 2300 gallons, from the leaking storage tank to a competent holding tank within the same building. BCI's contractors then began to conduct a cleanup of the facility. The following morning, Monday June 10th, a fire started in the Lower Warehouse which compromised a waste water holding tank. The Shoemakersville Fire Department responded quickly. Once the fire was fully extinguished, BCI's contractors resumed cleanup activities to address the inside of the building and the release that occurred to the ground outside the building.

The majority of the totes stored in Lower Warehouse and at least one of the waste water storage tanks have been badly damaged and some are known to be leaking. The condition of other containers is largely unknown at this time. Conditions inside the building have prevented a complete assessment.

The atmosphere inside the warehouse continues to be highly corrosive. These conditions are expected to lead to the ongoing degradation of containers stored in the building. Based on review of the facility's current inventories, many of the chemicals in the degraded totes and other containers stored on the racks are incompatible. Further degradation of the containers and to the racks may lead to further release of hazardous substances. There is still some risk of a fire, but the main threat is related to the commingling of incompatibles.

Residences are located adjacent to the Site to the north, south and west; there is an active railroad located adjacent to the facility the east; and the Schuylkill River is located about 200 feet to the west. Residents in the immediate area were asked to temporarily evacuate their homes during the initial release and again during the subsequent fire. There are ongoing concerns about the air quality and about whether private drinking water wells in the area were impacted.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Given the large volume and nature of the chemicals remaining in the building as well as the conditions at the Site following the nitric release and fire, PADEP requested EPA's assistance. Since arriving on the scene on June 10, 2019, EPA and PADEP have been coordinating with local agencies and BCI to assess conditions at the facility and are overseeing stabilization and cleanup efforts being conducted by BCI and its contractors.

Upon arriving on-site late Monday, June 10th, EPA OSCs met with the facility owner and state and local officials. The OSCs, along with EPA Superfund Technical Assessment & Response Team (START) contractor representatives conducted an initial assessment of conditions at the facility and observed ongoing response actions being conducted by the BCI's contractors. A significant amount of vapors were still emanating from Lower Warehouse. BCI's contractors were working to clean the floor inside the building. In an attempt to neutralize the acidic liquids (mix of nitric acid, waste water and fire suppression water) remaining on the floor of the building, the contractors were applying a mix of soda ash and oil dry. The contractors were shoveling the material into poly drums. Facility representatives explained that there were totes containing various chemicals staged inside, some of which contained incompatible materials. However, there was not much information about the current condition of the totes that were reportedly staged in the building. In addition to the activities inside, a second contractor arrived with a vacuum truck and pumped a nitric acid water mix that had been collected in a temporary containment just south of the building. PADEP officials worked with the facility and contractors to improve containment as rain water continued to accumulate in this area.

To obtain additional information, the START contractor conducted a limited assessment of the containers and conditions inside of the Lower Warehouse. A team of two START contractors made a Level B entry into the building. The OSC requested and all parties agreed that no cleanup activities would be conducted during their entry. BCI's contractors entered the building with START to evaluate the current condition of the totes. It was not possible to conduct a complete assessment due to safety concerns. START was able to determine that approximately 33 totes were staged inside. Where possible, START collected information from labeling on the totes and documented the conditions of the totes that were readily accessible. START found that many of the totes were badly degraded and that several were leaking or appeared to have leaked their contents. The totes on the floor, which are expected to have been in direct contact with the nitric acid, were badly damaged and the metal cages were deteriorated. In some cases the stacked totes were leaning badly. In addition, some of the totes that were stacked higher up were also damaged. Based on the condition of the totes, BCI and its contractors determined they would not be able to be moved at that time.

Based on the initial assessment activities by EPA and START and overall observations, the OSC expressed concerns to BCI owners regarding safety issues and the need to bring in additional resources before proceeding with additional activities. BCI officials were cooperative and started to work overnight to obtain additional resources.

On Tuesday, June 11, 2019, EPA mobilized additional resources to set up continuous air quality monitoring. Initial monitoring locations included the perimeter of the facility as well as locations closer to the building. EPA is monitoring for acid gases and for compounds that could result due to the nitric acid release that occurred including nitric acid, hydrogen fluoride, hydrochloric acid and oxidizers. Perimeter monitoring is also being conducted for volatile organic compounds (VOCs). Since continuous air quality monitoring began, all levels in outdoor monitoring locations both on the facility and in perimeter areas are within acceptable limits. Monitoring is also been conducted to evaluate conditions inside of the Lower Warehouse. Additional details will be provided in the next POLREP.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA has been conducting ongoing oversight of the response by BCI and its contractors. EPA is also conducting continuous air quality monitoring. Additional details regarding activities conducted since June 11, 2019 will be provided in the next POLREP.

2.1.2 Response Actions to Date

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

No information available at this time.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

EPA
PADEP
BCI

3.2 Cooperating Agencies

Berks County EMA
Shoemakersville Fire Department
Perry Township

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.